

## REMARKS

By this paper, Applicants have amended Claims 1 and 46-52. The amendment includes a number of editorial changes. New claims 54-57 have also been added. Support for the amendment and new claims may be found, for example, in the specification at pg. 3-6. No new matter has been added. Claims 1-5, 7-14, 18-21, 25, 30, 33, 35, 39, 42 and 44-57 are now pending for consideration.

### **Rejection to Claims 1-4, 5, 7-12, 14, 18, 25, 30, 33, 39, 40, 42, 44, 46-49, 52, and 53 under U.S.C. § 103(a)**

The Office Action rejected Claims 1-4, 5, 7-12, 14, 18, 25, 30, 33, 39, 40, 42, 44, 46-49, 52, and 53 under 35 U.S.C. § 103 as being unpatentable over U.S. Publication 2001/0034228, issued to Lehtovirta, et al. (Lehtovirta), in view of U.S. Publication No. 2001/0024443, issued to Alriksson, et al. (Alriksson), and further in view of U.S. Patent No. 6,047,331, issued to Medard (Medard). Applicants respectfully traverse this rejection.

#### **Claim 1**

Claim 1 recites, *inter alia*, an end node “receiving a fault signal indicating a network node fault,” and “determining using said generated list, if the network node fault corresponds to a network node that is used in routing signals to or from said end node.” The references cited in the Office Action at least fail to teach or suggest at least these elements, let alone the combination of these element as included in Claim 1 as a whole.

The Office Action states that Lehtovirta discloses a failure recovery operation where once a partial failure is detected, a list containing affected user equipment and radio access bearers (“RABs”) is generated and distributed among the network nodes. The list discussed in Lehtovirta is generated by a first node and is then sent to a second node. Para. [0040], [0044], [0045] (failure is detected in packet-switched core network (“PSCN”) node 20 and a message is sent to radio network controller (“RNC”) 26). The second node uses the list that was generated by the first node to reset affected RABs. Para. [0045] (the nodes that receive message releases all RABs on the list).

The Office Action notes that Lehtovirta does not disclose an end node receiving a fault signal or performing a recovery operation. The Office Action relies on Medard to correct the deficiencies of Lehtovirta.

Medard discloses a method and apparatus for automatic protection switching. Medard further discloses a number of nodes physically linked to each other. Col. 9, ll. 18-29. In some instances the nodes have a direct physical link, while in others the nodes are physically linked via a third node. Col. 9, ll. 31-43. Each node comprises various components including an automatic protection switch processor 14, a routing table 16, and a protection switching module 18. Col. 9, ll. 43-47. These components are part of the node. Protection switching module 18, which is part of the node 12a, is capable of detecting link failures by the absence of appropriate flow. Col. 10, ll. 31-33. Upon detection by protection switching module 18, node 12a may use a different link to communicate information. Col. 10, ll. 19-27. As soon as the protection switching module 18 detects fault, the node knows that the fault corresponds to a communication link directly connected to it. Thus the node 12a detects a failure using one of its own components, and automatically reroutes communication information accordingly.

The Office Action states that Medard discloses a node 12a that receives a signal from protection switching module 18. However, protection switching module 18 is a **component** of node 12a. Col. 9, ll. 43-47. Thus it is the node 12a that detects a link failure. Like Lehtovirta, Medard at least fails to disclose receiving a fault signal indicating a network node fault.

In addition, Medard does not disclose using a generated list to determine whether a network node fault corresponds to a network node that sends routing signals to or from the node itself. In Medard, the node detects a link failure and uses its routing table to automatically re-route communication signals. Thus, the routing table is used to re-route the communications signals, and not to determine if the fault corresponds to a network node that sends routing signals to or from the node. Thus, Medard, like Lehtovirta, also at least fails to teach or suggest determining, using a generated list, if the network node fault corresponds to a network node that is used in routing signals to or from the end node.

Alriksson fails to cure the deficiencies of Lehtovirta and Medard. Alriksson discloses a node with a routing table. Para. [0106]. Alriksson does not disclose a node receiving a fault signal indicating a network node fault, nor does the Office Action rely on Alriksson for this

teaching. Furthermore, Alriksson does not disclose using its routing table to determine if a network node fault corresponds to a network node that sends routing signals to or from the node itself. Similarly, the Office Action does not rely on Alriksson for this teaching either.

Thus, Alriksson, Lehtovirta, Medard, and every other reference cited in the Office Action fails to disclose an end node receiving a fault signal indicating a network node fault, and using a generated list to determine if the network node fault corresponds to a network node that is used in routing signals to or from the end node.

For at least the foregoing reasons, Applicants respectfully submit that Claim 1 is patentable. Independent Claims 39, 42, 46, 48, and 52, recite similar subject matter as Claim 1, and are also submitted to be patentable for at least the same reasons. Claims 2-4, 5, 7-12, 14, 18, 25, 30, 33, 40, 44, 47, 49, and 53 depend from the above mentioned independent claims and are believed to be patentable for at least the same reasons, and for the additional matter recited therein. For the foregoing reasons, Applicants respectfully request that the rejections of Claims 1-4, 5, 7-12, 14, 18, 25, 30, 33, 39, 40, 42, 44, 46-49, 52 and 53 should be withdrawn.

**Rejection to Claims 13 and 45 under U.S.C. § 103(a)**

The Office Action rejected Claims 13 and 45 under 35 U.S.C. § 103 as being unpatentable over Lehtovirta, Alriksson, and Medard, and further in view of U.S. Publication No. 2004/0081086 (hereinafter “Hippelainen”). Applicants respectfully traverse the rejection.

Claims 13 and 45 depend from Claims 1 and 42, respectively. As discussed above Lehtovirta, Alriksson and Medard fail to disclose all the elements of either Claim 1 or Claim 39. The addition of Hippelainen fails to cure the deficiencies of Lehtovirta, Alriksson and Medard. For the foregoing reasons, Claims 13 and 45 are believed to be patentable for at least the same reasons as Claims 1 and 42, and for the additional matter recited therein.

**Rejection to Claims 19-21, 35, and 41 under U.S.C. § 103(a)**

The Office Action rejected Claims 19-21, 35 and 41 under 35 U.S.C. § 103 as being unpatentable over Lehtovirta, Alriksson, and Medard, and further in view of U.S. Pat. No. 5,390,326, issued to Shah (hereinafter “Shah”). Applicants respectfully traverse the rejection for the following reasons.

Claims 19-21, 35 and 41 depend from amended Claims 1 and 39, respectively. As discussed above Lehtovirta, Alriksson and Medard fail to disclose all the elements of either Claim 1 or Claim 39. The addition of Shah fails to cure the deficiencies of Lehtovirta, Alriksson and Medard. For the foregoing reasons, Claims 19-21, 35 and 41 are believed to be patentable for at least the same reasons as Claims 1 and 39, and for the additional matter recited therein.

**Rejection to Claim 30 under 35 U.S.C. § 103(a)**

The Office Action rejected Claim 30 under 35 U.S.C. § 103 as being unpatentable over Lehtovirta, Alriksson, and Medard, and further in view of U.S. Pat. No. 6,578,085, issued to Khalil, et al. (hereinafter “Khalil”). Applicants respectfully traverse the rejection for the following reasons.

Claim 30 depends from Claim 1. As discussed above, Lehtovirta, Alriksson and Medard fail to disclose all the elements of Claim 1. The addition of Khalil fails to cure the deficiencies of Lehtovirta, Alriksson and Medard. For the foregoing reasons, Claim 30 is believed to be patentable for at least the same reasons as Claim 1, and for the additional matter recited therein.

**Rejection to Claims 50 and 51 under 35 U.S.C. § 103(a)**

The Office Action rejected Claims 50 and 51 under 35 U.S.C. § 103 as being unpatentable over Lehtovirta in view of Medard. Applicants respectfully traverse this rejection for the following reasons.

The Office Action states that Lehtovirta discloses a failure recovery operation where once a partial failure is detected, a list containing affected user equipment and radio access bearers (“RABs”) is generated and distributed among the network nodes. The list discussed in Lehtovirta is generated by a first node and is then sent to a second node. Para. [0040], [0044], [0045] (failure detected in packet-switched core network (“PSCN”) node 20, and message sent to radio network controller (“RNC”) 26). The second node uses the list that was generated by the first node to reset affected RABs. Para. [0045] (nodes that receive message, release all RABs on the list).

The Office Action notes that Lehtovirta does not disclose an end node receiving a fault signal or performing a recovery operation. The Office Action relies on Medard to correct the deficiencies of Lehtovirta.

Medard discloses a method and apparatus for automatic protection switching. Medard further discloses a number of nodes physically linked to each other. Col. 9, ll. 18-29. In some instances the nodes have a direct physical link, while in others the nodes are physically linked via a third node. Col. 9, ll. 31-43. Each node comprises various components including an automatic protection switch processor 14, a routing table 16, and a protection switching module 18. Col. 9, ll. 43-47. These components are part of the node. Protection switching module 18, which is part of the node 12a, is capable of detecting link failures by the absence of appropriate flow. Col. 10, ll. 31-33. Upon detection by protection switching module 18, node 12a may use a different link to communicate information. Col. 10, ll. 19-27. As soon as the protection switching module 18 detects fault, the node knows that the fault corresponds to a communication link directly connected to it. Thus the node 12a detects a failure using one of its own components, and automatically reroutes communication information accordingly.

The Office Action states that Medard discloses a node 12a, receiving a signal from protection switching module 18. However, protection switching module 18 is a **component** of node 12a. Col. 9, ll. 43-47, and thus it is the node 12a that detects a link failure. Thus Medard at least fails to disclose receiving a fault signal indicating a network node fault.

In addition, Medard does not disclose using a generated list to determine whether a network node fault corresponds to a network node that sends routing signals to or from the node itself. In Medard, the node detects a link failure and uses its routing table to automatically re-route communication signals. Thus, the routing table is used to re-route the communications signals, and not to determine whether the fault corresponds to a network node that sends routing signals to or from the node. Thus, Medard also at least fails to teach or suggest determining, using a generated list, if the network node fault corresponds to a network node that is used in routing signals to or from said end node.

Thus Lehtovirta, Medard, and every other reference cited in the Office Action fail to teach or suggest an end node receiving a fault signal indicating a network node fault, and

determining, using said generated list, if the network node fault corresponds to a network node that is used in routing signals to or from said end node.

For at least the foregoing reasons, Claim 50 is believed to be patentable. Claim 51 recites similar subject matter to Claim 50 and is believed to be patentable for at least the same reasons as Claim 50. For the foregoing reasons, Applicants respectfully request that the rejections of Claims 50 and 51 be withdrawn.

#### **Discussion of New Claims 54-57**

New Claim 54 recites features similar to those of Claim 1. Accordingly, Claim 54 is allowable for at least the same reasons as Claim 1. Further, each of Claims 55-57 are dependent on Claim 54, and therefore each of Claims 55-57 is allowable for at least the same reasons as Claim 54 and the subject matter of their own limitations.

**CONCLUSION**

In light of the foregoing, Applicants submit that the application is in condition for allowance. Reconsideration and allowance are respectfully requested.

Please charge any fees or overpayments that may be due with this response to Deposit Account No. 17-0026.

Respectfully submitted,

Dated: June 3, 2010

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